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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,489	12/18/2001	Jeff Lindsay	KCX-436A (16659A)	2351
7590 11/18/2003			EXAMINER	
Timothy A. Cassidy, Esq. Dority & Manning, Attorneys at Law, P.A. P.O. Box 1449 Greenville, SC 29602			FORTUNA, JOSE A	
			ART UNIT	PAPER NUMBER
			1731	

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,489

Applicant(s)

LINDSAY ET AL.

Examiner

José A Fortuna

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 and 27-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17 and 21-26 is/are rejected.
- 7) ☒ Claim(s) 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 10/01/03
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 02/11/03
02/10/03 & 06/27/02
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of group II in Paper filed on July 18, 2003 is acknowledged. The traversal is on the ground(s) that group I and II are similar, even though distinct, and therefore, searching both inventions should not create an unreasonable burden. This is not found persuasive because the groups have different scope in the complexing agents, i.e., group II requires either aldehyde polymers or an anionic surfactant, which are not necessarily included in the species/genus of the group I. More specifically group I only requires an anionic reactive polymer as the complexing agent and group II does not require for the complexing agent to be neither reactive nor anionic nor to be a surfactant, i.e., only the surfactant is required to be anionic. As it can be seen searching for group I would create a burden.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 17, 21 and 24-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Lauzon, WO 00/34583.

Lauzon teaches a paper sizing composition having a coacervate stabilizing agent comprising an anionic component and a cationic component, see abstract.

Polyvinylamines are within the cationic components suggested by Lauzon, see page 13,

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line 17, along with anionic surfactants, see page 12, lines 4-16, Lauzon teaches also addition ranges falling within the claimed range see page 16, lines 6-15 and page 17, lines 4-17.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 17, 21-24 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Smigo et al., US Patent No. 5,281,307.

Smigo et al. teach a papermaking process in which a polyvinylamine polymer is added to a paper web, preferably at the dry end, along with a crosslinking agent, see abstract. The crosslinking agent as shown in column 6, lines 8-20, are aldehyde functional polymers/resins and carboxylic acid copolymers, including maleic acid copolymers, which are anionic in nature, same as the ones disclosed/claimed. Regarding claim 22, Smigo et al. teach that the polyvinylamine polymer comprises a partially hydrolyzed polyformamide, see column 5, lines 14-24 and in the same lines they teach same hydrolysis range as claimed, in claim 23. Smigo et al. teach similar addition range as claimed in claim 24, see column 6, lines 14-20. Regarding claim 26, the polymeric aldehyde functional compound taught by Smigo et al in column 6, lines 8-20 are well known wet strength agents.

Allowable Subject Matter

5. Claims 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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6. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach a polyelectrolyte complex formed with a mixture of a polyvinylamine polymer and an aldehyde polysaccharide or a glyoxylated polyacrylamide. Note that aldehyde cellulose is included within the aldehyde polysaccharides.

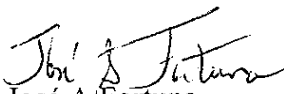
Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure in the art of "Paper having an improved wet strength."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A Fortuna whose telephone number is 703-305-7498. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0662.


José A Fortuna
Primary Examiner
Art Unit 1731

JAF